

**METHODS AND SYSTEMS FOR PREDICTING SOFTWARE DEFECTS
IN AN UPCOMING SOFTWARE RELEASE**

Abstract of the Disclosure

5

The present invention provides a novel way to forecast the number of software defects for an upcoming software release. The systems and methods of the present invention involve evaluating the relative size of the upcoming software release with respect to a baseline software release, and estimating the number of expected defects based on the relative size of the upcoming software release and the number of observed software defects for the baseline release. Additional robustness may be achieved by adjusting the forecast to take into consideration regression defects that were detected in the baseline release as well as any code re-factoring. The present invention may be used in various applications such a project management system to allow a project manager to allocate sufficient resources to handle software defects, and to plan accordingly. In various embodiments, a metric is provided to measure the quality achieved after product implementation, based on the forecasted number of software defects.

20